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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |  |
|---|-------------|----------------------|---------------------|------------------|--|--|
| 10/661,793  | 09/12/2003  | Chi-An Kao           | TS01-1037           | 8353             |  |  |
| 8933  | 7590        | 09/24/2008           | EXAMINER            |                  |  |  |
| DUANE MORRIS LLP - Philadelphia<br>IP DEPARTMENT<br>30 SOUTH 17TH STREET<br>PHILADELPHIA, PA 19103-4196 |             |                      |                     | NGUYEN, KHIEM D  |  |  |
| ART UNIT  |             | PAPER NUMBER         |                     |                  |  |  |
| 2823  |             |                      |                     |                  |  |  |
| MAIL DATE   |             | DELIVERY MODE        |                     |                  |  |  |
| 09/24/2008  |             | PAPER                |                     |                  |  |  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|   |                        |                     |
|---|------------------------|---------------------|
| <b>Advisory Action<br/>Before the Filing of an Appeal Brief</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|   | 10/661,793             | KAO ET AL.          |
|   | <b>Examiner</b>        | <b>Art Unit</b>     |
|   | KHIEM D. NGUYEN        | 2823                |

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 29 August 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1.  The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a)  The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b)  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2.  The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3.  The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a)  They raise new issues that would require further consideration and/or search (see NOTE below);
  - (b)  They raise the issue of new matter (see NOTE below);
  - (c)  They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d)  They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4.  The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5.  Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
6.  Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7.  For purposes of appeal, the proposed amendment(s): a)  will not be entered, or b)  will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: 12-14.

Claim(s) objected to: None.

Claim(s) rejected: 8-11 and 15-17.

Claim(s) withdrawn from consideration: None.

#### AFFIDAVIT OR OTHER EVIDENCE

8.  The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9.  The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10.  The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11.  The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.
12.  Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_
13.  Other: \_\_\_\_\_.

/Khiem D. Nguyen/  
Examiner, Art Unit 2823

Continuation of 11. does NOT place the application in condition for allowance because: Applicants contend that the reference, Sahin et al. (U.S. Pub. 2003/0220708), herein known as Sahin provides no feedback communication to the means that creates the opening in the layer of etch resist material, much less feedback communication to the means that creates the opening in the layer of etch resist material for controlling the CD's of the opening, as in the claimed invention.

In response to Applicants' contention that Sahin does not teach or suggest said feedback mechanism communicating with said means for creating an opening through a layer of etch resist material to control said critical dimension measurement of said opening by implementing corrections in said means for creating an opening through a layer of etch resist material.

Applicants' attention is respectfully directed to (pages 16-17, paragraphs [0207]-[0212] and FIGS. 8A(1) and 8A(2)), where Sahin discloses a flow chart of a process for forming shallow trench isolation (STI) regions within a substrate including (step 808, FIG. 8A(1)) of using a metrology tool 324b (see page 7, paragraphs [0100]-[0105] and FIG. 3) to measure the width, depth and/or profile of the openings formed within the patterned masking layer (patterned photoresist layer) (see page 16, paragraphs [0210]-[0211]). The information obtained can be communicated to a module controller 114 (see page 5, paragraph [0064] and FIG. 1A, for example). If the obtained critical dimension (CD) measurement of the opening created through the patterned photoresist layer is not within design specification, then in (step 811, FIG. 8A(1)), the module controller 114 may reject the wafer as being out of design specification and may direct a inventive system 100 (see page 5, paragraphs [0070]-[0072] and FIG. 1B) to rework the wafer (step 807, FIG. 8A(1)) (see page 16, paragraph [0211]). If the controller 114 determines that the patterned photoresist layer is within the specification requirements, in (step 812, FIG. 8A(2)), the module controller 114 directs the etch tool 102 to perform an STI etch process based on the dimensions/profile of the openings of the patterned photoresist mask layer (see page 17, paragraph [0212]).

In view of the above, it is respectfully submitted that Sahin does provide a feedback mechanism that communicates with the means for creating an opening of the photoresist material layer and control the critical dimension measurement of the opening by implementing corrections in the means for creating an opening through the photoresist layer. Sahin discloses particularly in (page 16, paragraph [0209]) that, after the module controller 114 rejected the wafer for being not within the specification requirements. The wafer may be reprocessed via a lithography tool (not shown). Therefore, by doing so, Sahin providing a feedback mechanism for assuring that the obtained critical dimension measurement of the opening created through the photoresist layer is within design specification. The feedback mechanism communicates with the means for creating the opening created through the photoresist layer to implement necessary corrections to assure that the critical dimensions measurement of the opening is within design specification before conveying the wafer to the the etch tool 102 to perform an STI etch process (which creating an opening through the layer of insulation material).

For this reason, Examiner holds the final rejection proper.